

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-51 are pending in the present application, and Claims 1, 16, 20, 21, 29, and 30 having been amended by the present amendment.

In the outstanding Office Action, Claims 1-51 were rejected under 35 U.S.C. § 103(a) as unpatentable over Kamiya et al (U.S. Pat, No. 5,11,686) in view of Takaba et al (U.S. Pat, No. 5,506,773).

Firstly, Applicant acknowledges with appreciation the courtesy of Examiner Tran to conduct an interview for this case on September 8, 2004 during which time the issues in the outstanding Office Action were discussed as substantially summarized herebelow. During the interview, Applicant's representative discussed changes with regards to clarifying that the nature of the inherent data and its segregation from the common data. No agreement on patentability was reached.

The present amendment clarifies that the inherent data includes data whose selection is determined in advance in correspondence to the abnormal event detected. Such a feature is supported in paragraph [0113] of the specification which states that:

Note that the corresponding relationships of the diag code and the inherent data which should be selected is already stored in the ROM (not shown).

Meanwhile, as discussed during the interview, Takaba et al disclose that diagnostic data, such as the number of rotations of the engine or water temperature of the engine, are stored in sequence in corresponding addresses within a frame, and further disclose that an abnormality code

including the type of malfunction is set at the beginning.¹ Further, Takaba et al disclose in a discussion of the fault diagnosis that

As described above, in this embodiment, when a malfunction in the throttle sensor is detected, data indicating the *various states of the motor* vehicle immediately after the determination are stored. Therefore, analysis of the data stored immediately after the occurrence of the malfunction makes it possible *to determine the running state when the malfunction occurred*, making it easy to investigate the cause of the fault.

... Also, when data is updated and stored at predetermined intervals, data may be stored while cyclically switching sequentially a plurality of storage areas. When a malfunction is detected, updating and storing in all these storage areas is inhibited to freeze the data, so that data obtained immediately after the malfunction is detected, *as well as the process leading to the malfunction occurrence* can be analyzed.² [emphasis added]

Thus, Takaba et al disclose the storage of both normal operating conditions and the storing of operating conditions occurring when a malfunction occurs. There is no predetermination of which data as inherent data to the malfunction is to be stored based on a malfunction code. Rather, all conditions normal and abnormal are stored for subsequent recall and analysis. Hence, Figure 5 of Takaba et al shows a malfunction code stored with sequential data indicating the various states of the motor, including normal data dispersed together with abnormal data. Accordingly, there is no disclosure or suggestion in Takaba et al for storage of inherent data whose selection is determined in advance in correspondence to the abnormal event detected, as presently defined in the independent claims.

Further, during the interview, Kamiya et al, particularly Figure 4, was discussed.

Similar to Takaba et al, Kamiya et al disclose that:

While the vehicle is running, a decision is made at fixed time intervals whether or not a fault has occurred, and *when a fault did not occur* in a certain time interval, the oldest piece of stored data in the operating condition memory in the RAM 28 is erased and *the latest operating conditions are written in that memory area*. This operation is repeated. Incidentally, the

¹ Takaba et al, col. 5, lines 2-6.

² Id., col. 5, line 47, to col. 6, line 23.

memory is of course arranged such that the stored data is preserved even after the power supply switch (key switch) of the vehicle is turned off. And, from the time when a fault occurred, *the storing operations are repeated for a fixed time period* and thereafter, a storing operation is not performed, but the final data is preserved.³ [emphasis added]

Thus, Kamiya et al, like Takaba et al, disclose the storage of diagnostic data in a sequential format such that the abnormal data is dispersed with normal data. Hence, the sequential recording of the data illustrated in Figure 4 of Kamiya et al does not represent the storage of inherent data whose selection is determined in advance in correspondence to the abnormal event detected. Accordingly, there is no disclosure or suggestion in Kamiya et al for storage of the inherent data whose selection is determined in advance in correspondence to the abnormal event detected, as presently defined in the independent claims.

Accordingly, it is respectfully submitted that independent Claims 1, 16, 20, 21, 29, and 30, and the claims depending therefrom, patentably define over the prior art.

³ Kamiya et al, col. 4, lines 6-18.

Appln No. 09/845,179
Reply to Office Action of June 29, 2004

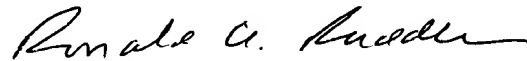
Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

CUSTOMER NUMBER
22850

RTP/RAR/clh
Tel.: (703) 413-3000
Fax: (703) 413-2220



Robert T. Pous
Attorney of Record
Registration No. 29,099
Ronald A. Rudder, Ph. D.
Registration No. 45,618

II:\ATTY\RAR\AMENDMENTS\205007US\AM4.DOC